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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Mihaela Van Der Schaer

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05/09/2005

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

WONG, ALLEN C

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,672

Applicant(s)

SCHAAR ET AL.

Examiner

Allen Wong

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SR/08)

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/6/04 have been fully read and considered but they are not persuasive.

1. Regarding the last sentence on page 1 of applicant's remarks, applicant states the traversal of the provisional obviousness double patenting rejection. The examiner respectfully disagrees. The provisional obviousness double patenting rejection is valid because the claim language of claim 1 of the present invention, "encoding... video to generate extended base layer reference frames... generating frame residuals...", and the claim language of claim 3 of the present invention, "coding the frame residuals with a fine granular scalable codec", combined together to form the similar language of claim 1 of copending Application No. 09/793,035, "coding video data to produce base layer frames... generating residual images... coding the residual images with a fine granular scalability..." The reason for why a person of ordinary skill in the art would conclude that the invention defined in claims 1/3 of the present invention is an obvious variation of the invention defined in claim 1 of the copending Application No. 09/793,035 is by simply tweaking the wording of the claims 1/3 of the present invention to mirror the claim language of claim 1 of the copending Application No. 09/793,035 as any one of ordinary skill in the art can coherently, lucidly peruse.

Similarly, the combination of claims 25 and 27 of the present invention is equivalent to claim 9 of copending Application No. 09/793,035 because the claim language of claims 25 and 27 of the present invention is similar to the claim language of

claim 9 of copending Application No. 09/793,035. Also, the combination of claims 13 and 15 of the present invention is equivalent to claim 11 of copending Application No. 09/793,035 because the claim language of claims 13 and 15 of the present invention is similar to the claim language of claim 11 of copending Application No. 09/793,035. And claim language of claim 7 of the present invention is almost identical to claim language of claim 5 of copending Application No. 09/793,035. The claim language of claim 19 of the present invention is almost identical to the claim language of claim 12 of copending Application No. 09/793,035, and the claim language of claim 31 of the present invention is almost identical to the claim language of claim 10 of copending Application No. 09/793,035.

Thus, a provisional obviousness-type double patenting rejection is done because the conflicting claims have not in fact been patented.

Regarding lines 18-20 on page 2 of applicant's remarks, applicant asserts that De Bonet fails to teach the generation of extended base layer reference frames which each includes a base layer reference frame and at least a portion of an associated enhancement layer reference frame. The examiner respectfully disagrees. Element 220 of De Bonet's fig.2 is the layered video encoder that uses a base layer module 224 and an enhancement layer module 228 to generate base layer reference frames, where the output of element 220 send the extended-base layer reference frames to the transmission satellite 230 in preparation for transmission to the receiver satellite 250. Then, element 220 of fig.3 is clarified in detail in that the encoder 220 comprises of a base layer module 224 and an enhancement layer module 228, and elements 224 and

228 are used together to form the extended base layer reference frames. And, in fig.9, the "extended" or enhanced base layer reference frames include base layer frames, as inputted in element 905, and at least a portion of an associated enhancement layer reference frame, as inputted in element 925 where high-resolution motion vectors are the "portion of an associated enhancement layer reference frame". Finally, De Bonet discloses the base layer and high resolution motion vectors are used for prediction where the reference frames, I and P frames, are used to obtain B-frames, thus prediction requires reference frames, as disclosed in col.13, ln.48-50.

Therefore, De Bonet discloses the generation of extended base layer reference frames which each includes a base layer reference frame and at least a portion of an associated enhancement layer reference frame.

Regarding lines 5-7 on page 3 of applicant's remarks, applicant contends that De Bonet does not disclose the generation of frame residuals from the extended base layer reference frames. The examiner respectfully disagrees. De Bonet's fig.6, element 655 generates frame residuals from uncoded video and fig.9, element 945 is where the frame residuals are generated from the extended base layer reference frames.

Regarding lines 16-18 on page 3 of applicant's remarks about claims 3, 15 and 27, applicant states that Wu does not cure the deficiencies of De Bonet because De Bonet fails to disclose the above limitations. The examiner respectfully disagrees. De Bonet does teach discloses the generation of extended base layer reference frames which each includes a base layer reference frame and at least a portion of an associated enhancement layer reference frame. De Bonet does not specifically

disclose the step of coding the frame residuals with a fine granular scalable codec to generate fine granular scalable enhancement layer frames. However, Wu teaches the use of progressive fine granular scalable codec to generate fine granular scalable enhancement layer frames (col.5, ln.23-33). Therefore, it would have been obvious to one of ordinary skill in the art to combine Wu's teaching of progressive fine-granularity scalable encoding scheme with De Bonet's video encoding system for yield high encoding efficiency and good error recovery, especially during transmission over the Internet and wireless channels, as disclosed in Wu's col.6, ln.66 to col.7, ln.2.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 3, 7, 13, 15, 19, 25, 27 and 31 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5 and 9-12 of copending Application No. 09/793,035. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 1 and 3 of the present invention is equivalent to

claim 1 of copending Application No. 09/793,035. Similarly, the combination of claims 25 and 27 of the present invention is equivalent to claim 9 of copending Application No. 09/793,035. Also, the combination of claims 13 and 15 of the present invention is equivalent to claim 11 of copending Application No. 09/793,035. And claim 7 of the present invention is almost identical to claim 5 of copending Application No. 09/793,035, claim 19 of the present invention is almost identical to claim 12 of copending Application No. 09/793,035, and claim 31 of the present invention is almost identical to claim 10 of copending Application No. 09/793,035.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 4-14, 16-26 and 28-36 are rejected under 35 U.S.C. 102(e) as being anticipated by De Bonet (6,510,177), as addressed in the previous Office Action, paper no.5 mailed on February 20, 2004.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Bonet (6,510,177) in view of Wu (6,614,936), as addressed in the previous Office Action, paper no.5 mailed on February 20, 2004.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Wong
Primary Examiner
Art Unit 2613